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## NOTICE OF ALLOWANCE AND FEE(S) DUE

41505 7590 04/02/2009

WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)  
CIRA CENTRE, 12TH FLOOR  
2929 ARCH STREET  
PHILADELPHIA, PA 19104-2891

EXAMINER

LY, CHEYNE D

ART UNIT

PAPER NUMBER

2168

DATE MAILED: 04/02/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,941	08/21/2003	J. Patrick Thompson	MSFT-1749/302725.01	1302
TITLE OF INVENTION: SYSTEMS AND METHODS FOR SEPARATING UNITS OF INFORMATION MANAGEABLE BY A HARDWARE/SOFTWARE INTERFACE SYSTEM FROM THEIR PHYSICAL ORGANIZATION				

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/02/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

41505 7590 04/02/2009  
**WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)**  
**CIRA CENTRE, 12TH FLOOR**  
**2929 ARCH STREET**  
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J. Patrick Thompson

MSFT-1749/302725.01

1302

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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/02/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
LY, CHEYNE D	2168	707-200000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/147; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

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## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 322 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 322 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/646,941

**Applicant(s)**

THOMPSON ET AL.

**Examiner**

CHEYNE D. LY

**Art Unit**

2168

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to January 14, 2009.
2. ☒ The allowed claim(s) is/are 1,3-18,33,34,39-51,53-59,62-68,70-76 and 79-84.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Cheyne D Ly/  
Examiner, Art Unit 2168

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Plat on March 27, 2009.

**REPLACE** Claims 1-84 with claims 1-84 amended by examiner (marked up) set forth below:

1. (Currently amended) A computer-readable storage medium with computer-readable instructions, the computer-readable storage medium comprising:  
instructions for an operating system, the operating system comprising a shell and a kernel, the kernel of the operating system including a database management program and a file system, and the file system is integrated with the database management program ~~a file system integrated with a database management program~~, the operating system configured to store data in the file system as file streams, and generate Items associated with the file streams in the database management program, the Items interconnected by a plurality of Relationships managed by said database management program of the operating system, each of said Items having a boundary comprising an item type, applicable subtype information, complex type properties and extensions if any, and a list of the other Items owned by the Item and paths to the file streams stored in the file system, further wherein the list of other Items owned by the Item identifies other Items the Item extends an owning relationship to, further wherein an Item that extends an owning relationship controls at least the life time of the relationship; and  
instructions for the database management program of the operating system to generate the owning relationship extending from a first Item to a second Item, wherein an

owning relationship extending from the first Item to the second Item denotes to said database management program of the operating system that a file stream associated with said second Item is publicly accessible to said first Item, and a lack of an owning relationship extending back from said second Item to said first Item denotes to said database management program of the operating system that a file stream associated with said first Item is inaccessible to said second Item.

2. (Canceled)

3. (Currently amended) The computer-readable storage medium of claim 1 wherein the Relationship from said first Item to said second Item logically denotes in said database management program of the operating system that said second Item is public and accessible to said first Item.

4. (Currently amended) The computer-readable storage medium of claim 1 wherein said first Item is an Item Folder.

5. (Currently amended) The computer-readable storage medium of claim 4 wherein said second Item is an Item Folder.

6. (Original) The computer-readable storage medium of claim 4 wherein said second Item is a Category.

7. (Currently amended) The computer-readable storage medium of claim 4 wherein said second Item is an Item that is not an Item Folder or a Category.

8. (Currently amended) The computer-readable storage medium of claim 1 wherein said first Item is a Category.

9. (Currently amended) The computer-readable storage medium of claim 8 wherein said second Item is an Item Folder.

10. (Currently amended) The computer-readable storage medium of claim 8 wherein said second Item is a Category.

11. (Currently amended) The computer-readable storage medium of claim 8 wherein said second Item is an Item that is not an Item Folder or a Category.

12. (Currently amended) The computer-readable storage medium of claim 1 wherein said first Item is an Item that is not an Item Folder or a Category.

13. (Currently amended) The computer-readable storage medium of claim 12 wherein said second Item is an Item Folder.

14. (Currently amended) The computer-readable storage medium of claim 12 wherein said second Item is a Category.

15. (Currently amended) The computer-readable storage medium of claim 12 wherein said second Item is not an Item Folder or a Category.

16. (Currently amended) The computer-readable storage medium of claim 1 wherein said second Item is an Item Folder.

17. (Currently amended) The computer-readable storage medium of claim 1 wherein said second Item is a Category.

18. (Currently amended) The computer-readable storage medium of claim 1 wherein said second Item is an Item that is not an Item Folder or a Category.

19-32. (Canceled)

33. (Currently amended) The computer-readable storage medium of claim 12 wherein said second Item has a Relationship to said first Item.

34. (Currently amended) The computer-readable storage medium of claim 33 wherein said Relationship from said first Item to said second Item logically denotes in said database management program of the operating system that the file stream associated with said second Item is public and accessible to said first Item, and wherein said Relationship from said second Item to said first Item logically denotes in said database

management program of the operating system that said file stream associated with the first Item is public and accessible to said second Item.

35-38. (Canceled)

39. (Currently amended) The computer-readable storage medium of claim 33 wherein said first Item is a Category.

40. (Currently amended) The computer-readable storage medium of claim 39 wherein said second Item is an Item Folder.

41. (Currently amended) The computer-readable storage medium of claim 39 wherein said second Item is a Category.

42. (Currently amended) The computer-readable storage medium of claim 39 wherein said second Item is an Item that is not an Item Folder or a Category.

43. (Currently amended) The computer-readable storage medium of claim 33 wherein said first Item is an Item that is not an Item Folder or a Category.

44. (Currently amended) The computer-readable storage medium of claim 43 wherein said second Item is an Item Folder.

45. (Currently amended) The computer-readable storage medium of claim 43 wherein said second Item is a Category.

46. (Currently amended) The computer-readable storage medium of claim 43 wherein said second Item is not an Item Folder or a Category.

47. (Currently amended) The computer-readable storage medium of claim 1 wherein each Item from among said Items has a Relationship to at least one other Item.

48. (Currently amended) The computer-readable storage medium of claim 1 wherein a subset of Items comprise Item Folders.



49. (Currently amended) The computer-readable storage medium of claim 1 wherein a subset of Items comprise Categories.

50. (Currently amended) The computer-readable storage medium of claim 1 wherein a subset of Items comprise Items that are not Item Folders or Categories.

51. (Currently amended) A computer system, the computer system comprising:  
hardware including a computer readable storage medium;  
instructions for an operating system stored in the computer readable storage medium, the operating system configured to manage the hardware, the operating system comprising a shell and a kernel. the kernel of the operating system including a database management program and a file system and the file system is integrated with the database management program ~~a file system integrated with a database management program, a first portion of the operating system configured to operate in a user mode and a second portion of the operating system configured to operate in a kernel mode;~~  
the operating system further configured to store data in the file system as file streams, and generate Items associated with the file streams in the database management program of the operating system, the Items interconnected by Relationships, each of said Items having a boundary comprising an item type, applicable subtype information, complex type properties and extensions if any, and a list of the other Items owned by the Item and paths to the file streams stored in the file system, further wherein the list of other Items owned by the Item identifies other Items the Item extends an owning relationship to, further wherein an Item that extends an owning relationship controls at least the life time of the relationship; and  
the database management program of the operating system configured to generate an owning relationship extending from a first Item to a second Item, wherein the owning relationship extending from the first Item to the second Item denotes to said database management program of

the operating system that a file stream associated with said second Item is publicly accessible to said first Item, and a lack of an owning Relationship extending back from said second Item to said first Item denotes to said database management program of the operating system that a file stream associated with said first Item is inaccessible to said second Item,

52. (Canceled)

53. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein the Relationship from said first Item to said second Item logically denotes in said database management program of the operating system that said file stream associated with the second Item is public and accessible to said first Item.

54. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein said first Item is an Item Folder.

55. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein said first Item is a Category.

56. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein said first Item is an Item that is not an Item Folder or a Category.

57. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein said second Item is an Item Folder.

58. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein said second Item is a Category.

59. (Currently amended) The computer system ~~database management program of the operating system~~ of claim 51 wherein said second Item is an Item that is not an Item Folder or a Category.

60.-61. (Canceled)

62. (Currently amended): The ~~computer system database management program of the operating system~~ of claim 51 wherein said second Item has a Relationship to said first Item.

63. (Currently amended) The ~~computer system database management program of the operating system~~ of claim 62 wherein said Relationship from said first Item to said second Item logically denotes in said database management program of the operating system that said file stream associated with the second Item is public and accessible to said first Item, and wherein said Relationship from said second Item to said first Item logically denotes in said database management program of the operating system that said file stream associated with the first Item is public and accessible to said second Item.

64. (Currently amended) The ~~computer system database management program of the operating system~~ of claim 51 wherein each Item from among said Items has a Relationship to at least one other Item.

65. (Currently amended) The ~~computer system database management program of the operating system~~ of claim 51 wherein a subset of Items comprise Item Folders.

66. (Currently amended) The ~~computer system database management program of the operating system~~ of claim 51 wherein a subset of Items comprise Categories.

67. (Currently amended) The ~~computer system database management program of the operating system~~ of claim 51 wherein a subset of Items comprise Items that are not Item Folders or Categories.

68. (Currently amended) A method for organizing data in a computer system, the method comprising:

receiving, from an application operating in user space of an operating system, a request to save data to a file system, wherein the operating system comprises a shell and a kernel, the kernel of the operating system including a database management program and the file system and the file system is integrated with the database management program ~~the file system and the file system is integrated with a database management program;~~

saving, by the operating system, the data to the file system as file stream;

generating, by the database management program, an Item, associated with the file stream each Item stored in the database management program having a boundary comprising an item type, applicable subtype information, complex type properties and extensions if any, and a list of the other Items owned by the Item and paths to associated file streams stored in the file system, further wherein the list of other Items owned by the Item identifies other Items the Item extends an owning relationship to, further wherein an Item that extends an owning relationship controls at least the life time of the relationship; and

generating, by the database management program, an owning relationship extending from a first Item to a second Item, wherein the owning relationship extending from the first Item to the second Item denotes to said database management program that a file stream said second Item is publicly accessible to said first Item, and a lack of an owning relationship extending back from said second Item to said first Item denotes to said database management program that a file stream said first Item is inaccessible to said second Item.

69. (Canceled)

70. (Currently amended) The method of claim 68 further comprising: ~~the step of~~

denoting in database management program that, due to said Relationship, said second Item is public and accessible to said first Item.

71. (Previously presented) The method of claim 68 wherein said first Item is an Item Folder.

72. (Previously presented) The method of claim 68 wherein said first Item is a Category.

73. (Previously presented) The method of claim 68 wherein said first Item is an Item that is not an Item Folder or a Category.

74. (Previously presented) The method of claim 68 wherein said second Item is an Item Folder.

75. (Previously presented) The method of claim 68 wherein said second Item is a Category.

76. (Previously presented) The method of claim 68 wherein said second Item is an Item that is not an Item Folder or a Category.

77.-78. (Canceled)

79. (Currently amended) The method of claim 68 further comprising: ~~the step of~~ extending a Relationship from said second Item to said first Item

80. (Previously presented) The method of claim 79 wherein said Relationship from said first Item to said second Item logically denotes in said database management program that said file stream associated with the second Item is public and accessible to said first Item, and wherein said Relationship from said second Item to said first Item logically denotes in said database management program that said file stream associated with the first Item is public and accessible to said second Item.

81. (Original) The method of claim 68 wherein each Item from among said Items has a Relationship to at least one other Item.

1. The prior art of record fails to teach or suggest the claimed invention individually or in combination the limitation of "the operating system comprising a shell and a kernel, the kernel of the operating system including a database management program and a file system, and the file system is integrated with the database management program..." as set forth in claim 1, and similarly in claims 51 and 68.
2. The closest prior art, Barney et al. (newly cited), describes an integration of a database into a file management software, and Burger et al. (newly cited) describes a system for interfacing computer application programs written in different languages to a software system. However, neither Barney et al. or Burger et al. teaches or suggests the limitations cited above as being free of any prior art when read in the claims as a whole.

### **CONCLUSION**

1. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides

Art Unit: 2168

Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

2. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The USPTO's official fax number is 571-272-8300.
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.
4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo, can be reached on (571) 272-3642.

/Cheyne D Ly/

Primary Examiner, Art Unit 2168